# What You Need to Hnow About Hnee Arthroscopy

# VANDERBILT VUNIVERSITY

MEDICAL CENTER

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# The Knee Joint

The knee joint is made of three bones: the femur (thigh bone), the tibia (shin bone), and the patella (kneecap), which slides in a groove on the end of the femur. All three bones are lined with cartilage to helps cushion the bones, enabling them to glide freely. Inside the knee joint there are two structures called menisci. The medial and lateral meniscus act as "shock absorbers" for the knee and help protect the bones from rubbing onto one another. The bones of the knee are surrounded by a thin, smooth capsule lined by a thin synovial membrane which releases a fluid that lubricates the knee, reducing the friction to nearly zero in a healthy knee.



# What is an Arthroscopy?

Arthroscopy is a procedure in which a small telescope is placed inside your knee to allow the surgeon to see, and work, inside the knee joint. Arthroscopes are approximately 5mm in diameter, so the incision sites are small. This procedure is much less traumatic to the muscles, ligaments, and tissues than the traditional method of surgery.

The benefits of arthroscopy include improved visualization of knee structure, smaller incisions, more accurate surgery, rapid recovery, and less scarring. Arthroscopic surgical procedures are primarily performed on an outpatient basis and the patient is able to return home on the same day.

Knee arthroscopy can be performed for many different surgical .s. Vanderbilt vanderbilt procedures. Each procedure and patient's recovery time will vary.

### Meniscal Injuries:

Sometimes during activity, the meniscus can be rubbed or pinched to violently by the bones that they lie between. If the meniscus is damaged pain and discomfort can occur in the knees. Signs and symptoms of meniscal injuries include pain with full knee extension, "locking" of the knee, "giving way" of the knee and a "popping" or "clicking" in the knee.

#### A. Arthroscopic Removal:

Surgery is performed to removed the fragments of the damaged menisci. This surgery is often referred to as a meniscectomy. People receiving a meniscectomy can typically bear weight a day or two following surgery. Patients can usually expect to be back to sports or regualr activity in 4-6 weeks.



### B. Arthroscopic Repair:

This procedure is typically done if the menisci damage is on the outer edge of the meniscus. Patients who choose surgical repair require about 3 weeks of non-weight bearing to promote proper healing. Once the patient is able to bear weight, the knee is progressively conditioned under supervision.



## Anterior Cruciate Ligament (ACL) Tears:

A fall, twist, or blow may tear one or more of the four stabilizing ligaments in your knee.

A. Ligament Reconstruction:

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If needed, surgery can be performed to reconstruct the damaged ligament(s) in your knee. This surgery can be more invasive than the typical arthroscopy surgery. (Refer to ACL booklet)

## Smoothing Cartilage of Removing Loose Body:

Depending on the extent of cartilage damage, your doctor may choose to smooth the rough cartilage by shaving off the damaged fragments. Your surgeon may also remove a piece of cartilage that may have broken off inside your knee.





### A. Cartilage Damage:

Injury or damage may wear away articular cartilage. A piece of cartilage may break off in the joint and may cause pain, stiffness, or grinding.

#### B. Osteoarthritis:

Osteoarthritis is a type of arthritis that is caused by the breakdown and eventual loss in the cartilage of one or more joints.

### C. Debridement:

Although surgery is not the first line of treatment for osteoarthritis, it is an option. Debridement is the removal of dead, damaged, or infected tissue to improve the healing potential of the remaining healthy tissue.



## Patella Tracking Disorder:

The lateral retinaculum is a ligament complex that anchors the lateral edge of the patella. When this becomes abnormally tight it can pull and tilt the patella to the side and cause pain.

#### A. Lateral Release:

When the kneecap does not alighn properly, surgery can help it assume a better position. Your doctor can cut a .da. Sa. Vanderbilt Vanderbilt Vanderbilt Vanderbilt piece of the lateral retinaculum from top to bottom to allow more movement of the patella.

# Pre-operative Care

Prior to your surgery, you *may* have an evaluation with a Physical Therapist, who is a member of the rehabilitation team responsible for your care. The team consists of a doctor, Physical Therapist, and an Athletic Trainer. During pre-operative rehab, you will be instructed to perform a series of exercises in order to build up your strength and maintain normal motion. This will greatly help your recovery process after surgery. Please perform these exercises as your physical therapist or athletic trainer instructs you.

If you are over the age of 40, you are usually required to get a physical before being cleared for surgery. This may include tests such as blood work or an EKG to identify any complications. For some patients, it may be necessary to get clearance from your primary physician.

Be sure to tell your doctor about all the medications you are currently taking. Your doctor will inform you of which medications you can continue to take and which medicines need to be discontinued until further notice.

You may not eat or drink anything after midnight the night before your surgery. If you must take medicine then you will be permitted to do so with just a sip of water.



# Initial Postoperative Instructions

Medication: You will be given 2 prescriptions:

- 1. One for pain, which is a codeine derivative and should be taken if necessary.
- 2. One to control inflammation, which should be taken as directed.

#### Dressing:

- Leave your dressing on unless your first postoperative doctor or therapy visit is more than 48 hours after your surgery.
- · After 48 hours you may remove your dressing.
- LEAVE THE TAPE STRIPS OVER YOUR INCISIONS. These will stay on for 1\_ to 2 weeks and will slowly peel off.

#### Showering:

- You may shower and get your incisions wet 48 hours after your surgery.
- DO NOT soak in a tub or pool for 7-10 days to avoid excessive scarring and infection.

#### Cryocuff:

- Keep the Aircast cuff on at all times, exchanging with cold water every hour.
- Icing is very important to decrease swelling and pain and improve your mobility.
- After 24 hours, continue to use the cuff or ice 3 times a day, 15-20 minutes each time for two weeks.

Weight Bearing:

ACL Reconstruction only: You may begin to put weight on your leg when you have the feeling back in your leg focusing on striking the ground with your heel.

ACL with Meniscus Repair: You will be non-weight bearing for 4-6 weeks Femoral Nerve Block:

You were given an injection to block the conduction of your femoral nerve which conducts pain and controls your quadriceps muscle. Therefore, you should be relatively pain free, but have little control of your leg.

#### Immobilizer:

You should wear your immobilizer until the feeling returns in your leg.

#### Activities:

- Rest and elevate your leg for the first 24 hours by placing a pillow under your calf and/or ankle.
- DO NOT place a pillow under your knee.

\*\* It is very important to get your leg as straight as possible, as soon as possible. <u>\*\*\*Complications--Notice:</u>

Call us at (615) 322-7878 weekends, day or night if:

- You experience severe pain that is not relieved by your medicine
- You experience a temperature over  $101.5^\circ$ , redness or swelling in your thigh or calf

# Crutch Use

### To walk with crutches:

- Pull crutches under your arms and press them into your ribs.
- Move the crutches ahead of you 6 to 12 inches.
- Push down on the handgrips as you step up to or slightly past crutches.
- Make sure to bear weight on your hands, not under your arms.
- Check your balance before you continue.

### To sit down in a chair:

• Back up to the chair until you feel the chair on your legs.

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- Put both crutches in your hand on the affected side, reach back for the chair with the other hand.
- Lower yourself into the chair.

### To get up from the chair:

- Hold both crutches on your affected side.
- Slide to the edge of the chair.
- Push down on the arm of the chair on the good side.
- Stand up and check your balance.
- Put crutches under your arms, pressing crutches into ribs.

### Going Upstairs:

- Start close to the bottom step, and push down through your hands.
- Step up to the first step, remember the good foot goes up first!
- Next, step up to the same step with the other foot, making sure to keep the crutches with your affected limb.
  - Check your balance before you proceed to the next step.
  - Make sure someone is there to help if you need it.

### Going Downstairs:

- Start at the edge of the step, keeping your hips beneath you.
- Slowly bring the crutches with your affected limb down to the next step (the bad foot goes down first)!
- Be sure to bend at the hips and knees to prevent leaning too far forward, which could cause you to fall.
- · Check your balance before you continue.
- Make sure someone is there to help if you need it.

# **Return to Sports/Work**

The type of activity you want to participate in will help determine when you can return to it after surgery. The other consideration is physiology. The healing process cannot be influenced by anything other than time. The most important thing you can do is to regain your strength. This cannot be accomplished without exercising your leg.

After the biology of healing has been considered, and your strength and stability fully restored, you should be able to return to the activity of your choice. Your doctor may, however, recommend lifestyle changes for you if you present with joint changes such as arthritis or instability that could not be corrected with surgery.

The rehab team will help you regain normal movements and pain free activities to meet your particular lifestyle needs. After you have successfully eliminated most of your pain and have returned to your normal function, it is important for you to continue to be involved in some form of orthopaedic fitness to insure continued good physical health and activity levels. You should consider a lifestyle of organized physical activity to help prevent future complications. Your rehab team can advise you on this step.

There are 3 phases of rehabilitation with specific goals:

Phase 1 (week 1)

• Restore full ROM

• Perform daily activities pain free

Initiate good strength and proprioception

Phase 2 (week 2-3)

- Maintain full ROM
- Pain free daily activities
- Good strength and proprioception
- Return to activities per physician

Phase 3 (week 3-5)

Return to sport or activity

Restrictions may be in place depending on the surgical procedure.

### For more information on this and other injuries see our website: www.vanderbiltorthopaedics.com

This information is intended for education of the reader about medical conditions and current treatments. It is not a substitute for examination, diagnosis, and care provided by your physician or a licensed healthcare provider. If you believe that you, your child, or someone you know has the condition described herein, please see your healthcare provider. Do not attempt to treat yourself or anyone else without proper medical attention. All rights reserved 2010, Vanderbilt University, Vanderbilt University Medical Center, Vanderbilt Children's Hospital.

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